WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTERS PATENT OF THE UNITED STATES IS:

- 1. A resin composition, which comprises:
- a copolymer (A) comprising ethylene, as a major component, which is produced with a single-site catalyst, and an ethylene-vinyl alcohol copolymer (B) having an ethylene content of 20-60 mol.% and a degree of hydrolysis of 95% or above, said resin composition satisfying the equation (1):

 $1/99 \le \{\text{weight of }(A)\}/\{\text{weight of }(B)\} \le 99/1$ (1)

- 2. The resin composition as defined in Claim 1, wherein the copolymer (A) is an ethylene- α -olefin copolymer in which the α -olefin has β -8 carbon atoms.
- 3. The resin composition as defined in Claim 1, wherein the copolymer (A) has a molecular weight distribution (Mw/Mn) of not greater than 4.
- 4. The resin composition as defined in Claim 1, wherein the ethylene-vinyl alcohol copolymer (B) contains a phosphorus compound in an amount of 2-200 ppm in terms of elemental phosphorus.
- 5. The resin composition as defined in Claim 1, wherein copolymer (A) has a melt flow rate (MFR) of 0.1-50 g/min.
- 6. The resin composition as defined in Claim 1, wherein the EVOH copolymer (B) has a melt flow rate (MFR) of 0.1-100 g/10 min
- 7. The resin composition as defined in Claim 1, wherein the copolymer (A) has a density of 0.90-0.94 g/cm³ and the resin composition further comprises a carboxylic acid-modified polyolefin (C) and satisfies the equations (2) and (3):

 $60/40 \le \{\text{weight of (A)}\}/\{\text{weight of (B)}\} \le 99/1$ (2)





(3)

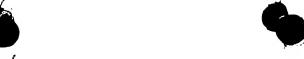
 $0.1/99.9 \le X \le \sqrt{20/80}$

- wherein $X = \{ weight | of (C) \} / \{ total weight | of (A) | and (B) \}.$
- 8. The resin composition as defined in Claim 7, wherein the combination of ethylene-vinyl alcohol copolymer (B) and the carboxylic acid-modified polyolefin (C), in the form of resin particles having an average particle diameter not greater than 5 μ m, is dispersed in a matrix of the copolymer (A).
- 9. The resin composition as defined in Claim 7, wherein the melt flow rate Ma of the copolymer (A) and the melt flow rate Mb of the ethylene-vinyl alcohol copolymer (B) satisfy the following equation (4):

$$0.05 \leq Ma/Mb \leq 5 \tag{4}$$

- 10. The resin composition as defined in Claim 7, which further comprises a hydrotalcite compound (D) in an amount of 0.0001-2% based on the total weight of (A) and (B).
- 11. The resin composition as defined in Claim 7, which further comprises a metal salt of higher aliphatic carboxylic acid (E) in an amount of 0.0001-2% based on the total weight of (A) and (B).
 - 12. A multilayered structure, which comprises:
- a layer of the resin composition as defined in Claim 7 and a layer of an ethylene-vinyl alcohol copolymer having an ethylene content of 20-60 mol.% and a degree of hydrolysis of at least 95%.
- 13. The multilayered structure as defined in Claim 12, which further comprises at least one layer comprising an ethylene- α -olefin copolymer produced with a single-site

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catalyst and having a density of 0.90-0.94 g/cm³, in which the α -olefin has 3-8 carbon atoms, and at least one layer comprising a carboxylic acid-modified polyolefin.

- 14. The multilayered structure as defined in Claim 12, which is formed by coextrusion.
- 15. The resim composition as defined in Claim 1, wherein the copolymer (A) has a density of 0.85-0.90 g/cm³, and the resin composition satisfies the following equation (5):

 $1/99 \le \{\text{weight of (A)}\}/\{\text{weight of (B)}\} \le 40/60$ (5)

16. The resin composition as defined in Claim 15, wherein the melt flow rate Ma of the copolymer (A) and the melt f low rate Mb of the ethylene-vinyl alcohol copolymer (B) satisfy the following equation (6):

 $0.2 \leq Ma/Mb \leq 20$ (6)

17. The resin composition as defined in Claim 15, which further comprises a carboxylic acid-modified polyolefin (C) and satisfies the following equation (7):

 $0.1/99.9 \le X \le 20/80$ (7)

wherein $X = \{\text{weight of } (C)\}/\{\text{total weight of } (A) \text{ and } (B).$

- 18. A multilayered structure, which comprises:
- a layer of the resin composition as defined in Claim 15, a layer of adhesive resin, and a layer of polyolefin.
- 19. The multilayered structure as defined in Claim 12, wherein the EVOH layer has a thickness of 5-100 $\mu m\,.$

20. A bag-in-box container comprising the multilayered structure as defined in Claim 18, wherein a core layer of the resin composition is laminated with inner and outer layers of an ethylene-o-olefin copolymer via the layers of adhesive resin.

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